

Hodgeman County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors

6/26/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 11 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Hodgeman County economy.¹

These 11 sectors have a total direct output of approximately **\$139.0 million** and support **516 jobs** in Hodgeman County. Running the model for all 11 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Hodgeman County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	516.2	32.57%	\$31,851,631	36.05%	\$139,007,036
Indirect Effect	43.5	2.74%	\$2,935,949	3.32%	\$6,929,627
Induced Effect	14.8	0.93%	\$1,148,773	1.30%	\$2,158,000
Total Effect	574.4	36.24%	\$35,936,353	40.68%	\$148,094,663

As shown in the above table, agriculture, food, and food processing sectors support **574 jobs**, or **36.24%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 11 agriculture, food, and food processing sectors is approximately **\$35.9 million**, or **40.68% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **409 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Hodgeman County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	408.9	\$89,736,658
Grain farming	59.5	\$37,151,127
Dairy cattle and milk production	28.7	\$9,187,396
Wholesale trade	13.5	\$2,310,648
All other crop farming	11.5	\$1,482,365
Real estate	6.0	\$395,116
Extraction of natural gas and crude petroleum	4.5	\$555,898
Marketing research and all other miscellaneous professional, scientific, and technical services	4.3	\$131,760
Securities and commodity contracts intermediation and brokerage	4.3	\$485,860
Monetary authorities and depository credit intermediation	2.6	\$412,053

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$89.7 million** to the Hodgeman County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	408.9	\$89,736,658
Grain farming	59.5	\$37,151,127
Dairy cattle and milk production	28.7	\$9,187,396
Wholesale trade	13.5	\$2,310,648
All other crop farming	11.5	\$1,482,365
Owner-occupied dwellings	0.0	\$1,063,008
Petroleum refineries	0.2	\$1,032,664
Truck transportation	2.6	\$711,920
Extraction of natural gas and crude petroleum	4.5	\$555,898
Securities and commodity contracts intermediation and brokerage	4.3	\$485,860

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Hodgeman County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	0.2	\$376,785.22
Grain farming	59.5	\$37,151,126.86
All other crop farming	11.5	\$1,482,365.13
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	408.9	\$89,736,656.19
Dairy cattle and milk production	28.7	\$9,187,396.05
Poultry and egg production	0.0	\$26,682.38
Animal production, except cattle and poultry and eggs	0.2	\$42,577.20
Support activities for agriculture and forestry	0.9	\$112,691.54
Bread and bakery product, except frozen, manufacturing	2.5	\$286,463.08
Farm machinery and equipment manufacturing	1.4	\$417,948.48
Veterinary services	2.3	\$186,341.63

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Hodgeman County, the retail sector was omitted.